

WHAT IS CLAIMED IS:

1. A process for preparing a supported chitosan biosorbent useful for the treatment of wastewater which comprises preparing a ceramic support material, preparing a chitosan gel, and coating said chitosan gel to said ceramic support material.
2. The process of claim 1 wherein a second surface coating of chitosan gel is applied to said supported chitosan biosorbent.
3. The process of claim 1 wherein said ceramic support material comprises acid treated alumina prepared by drying ceramic alumina, mixing the dry ceramic alumina with an acid to form a mixture, filtering and washing the mixture to prepare a washed mixture, and drying the washed mixture.
4. The process of claim 1 wherein said chitosan gel is prepared by dissolving chitosan in an acid.
5. The process of claim 4 wherein said acid is an organic acid.
6. The process of claim 5 wherein said organic acid is selected from the group consists of acetic and oxalic acid.
7. The process of claim 1 wherein said chitosan-coated biosorbent is filtered under a vacuum, washed, dried and coated with a second layer of chitosan gel.
8. A biosorbent composition comprising a support material coated with chitosan useful for the treatment of wastewater.

9. The composition of claim 8 wherein said biosorbent composition is useful for removing heavy metals from wastewater.

10. The composition of claim 8 wherein said support material comprises a  
5 ceramic support material.

11. The composition of claim 8 wherein said biosorbent composition is prepared by dip coating chitosan gel on to said support material.

12. The composition of claim 11 wherein said support material comprises a ceramic support material.  
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13. The composition of claim 10 wherein said biosorbent composition is prepared by spin coating chitosan gel on to said support material.  
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14. The composition of claim 13 wherein said support material comprises a ceramic support material.  
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15. A process for treating aqueous systems containing heavy metals comprising adding a chitosan-coated biosorbent to an aqueous system.  
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16. The process of claim 15 wherein said chitosan-coated biosorbent comprises a support material coated with chitosan gel.  
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17. The process of claim 15 wherein said support material comprises a ceramic support material.  
ceramic support material.  
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18. The process of claim 15 wherein the aqueous systems are aqueous waste streams.

19. A biosorbent composition comprising a support material coated with chitosan, its equivalents and the like useful for the treatment for wastewater.

20. A process for preparing a biosorbent useful for the treatment of  
5 wastewater which comprises preparing a ceramic support material, preparing a gel, and coating said gel to said ceramic support material, wherein said gel comprises chitosan, its equivalents and the like.

21. A process for treating aqueous systems containing heavy metals  
10 comprising adding a biosorbent to an aqueous system, wherein said biosorbent comprises a coating of chitosan, its equivalents and the like.